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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/619,508	07/16/2003	Masao Tomizawa	OKI.547	7516

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VOLENTINE FRANCOS, & WHITT PLLC
ONE FREEDOM SQUARE
11951 FREEDOM DRIVE SUITE 1260
RESTON, VA 20190

EXAMINER	
WARREN, DAVID S	

ART UNIT	PAPER NUMBER
2837	

DATE MAILED: 09/14/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/619,508	TOMIZAWA ET AL.	
	Examiner	Art Unit	
	David S. Warren	2837	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *16 July 2003*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-21* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1,2,10-12 and 16-21* is/are rejected.

7)☒ Claim(s) *3-9,13-15* is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *16 July 2003* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date ~~7/16/03~~. 7/16/03
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 112

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claims 2, 10 and 12 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Claim 2 (and similarly for claim 12) recites "the respective measurement result is standardized by the measurement result for a specified velocity of a specified note." This is unclear. The specification fails to clarify this limitation. Clarification is required. The Applicant is cautioned against the addition of new matter.

3. Claim 10 recites the limitation "said acoustic data" in line 3. There is insufficient antecedent basis for this limitation in the claim. The Examiner assumes that this "acoustic data" may be referring to the acoustic power data discussed in other claims.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and

the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

5. Claim 1 is rejected under 35 U.S.C. 103(a) as being unpatentable over Takemoto et al. (Japanese patent number: JP 04052692 A). In the following rejection, the Examiner notes that "velocity" and "volume" are synonymous, especially to one of ordinary skill. Regarding claims 1, 2, and 12, Takemoto discloses the use of a first memory for storing musical score data (performance data memory 4, the Examiner has had the Takemoto patent translated, a translation will be provided in any subsequent Office Action), a memory for storing velocity correction data (see English translation of Abstract Purpose; Takemoto states: "...correcting sound volume data in performance data in a storage means..."), a correction section (see Abstract Constitution; "sound volume is controlled according to the *corrected sound volume* data..." [emphasis added]), and a playback section (8). Takemoto does not explicitly disclose the use of a separate memories for storing score data and correction data. However, Takemoto does disclose the use of plural memories, one for storing score data (i.e., performance data) and one for storing table functions. Takemoto discloses two tables (figs. 4 and 8), both of which contain corrected volume (i.e., velocity) data. It would have been obvious to one of ordinary skill in the art to maintain a separate memory for both the score and correction data. The motivation for making this combination, would be to improve the sound quality of stored music without the need to manually adjust (or correct) the score data.

6. Claims 2, 12, and 16, 17, and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Takemoto et al. (Japanese patent number: JP 04052692 A) in view

of Baiker et al. (2001/0014161 A1). The teachings of Takemoto have been discussed supra regarding independent claim 1. Regarding claims 2 and 12 (as best as can be understood, see §112 rejection supra), Takemoto does not disclose the use of measuring and standardizing acoustic power. Baiker et al. discloses the use of measuring sound pressure and then compensating the loudness level (see first sentence of Abstract). While acknowledging subtle differences, the Examiner maintains that measuring the sound pressure is functionally equivalent to measuring the acoustic power (especially since both the Applicant and Baiker ultimately make these measurements to compensate for volume – in other words, either acoustic power or sound pressure would provide equivalent information to correct velocity data). It would have been obvious to one of ordinary skill in the art to combine the teachings of Takemoto and Baiker to obtain a score reproducing apparatus have a corrected velocity in accordance with acoustic power. The motivation for making this combination is that different systems will have different sound producing abilities, by measuring the sound output, and correcting the output in accordance with that measurement, audio quality can be improved. Regarding claims 16, 17, and 20, Baiker discloses that the sound pressure is measure and corrected accordingly, this appears to be in the performance stage. On the other hand, Takemoto, stores the correction data in the table function data memory – this appears to have been done in the manufacturing stage.

7. Claims 10, 11, 18, 19, and 21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Takemoto in view of Baiker et al. and Ueta et al. (20030004701). The teachings of Takemoto and Baiker have been discussed supra with respect to

independent claims 1 and 12. Regarding claims 10, 18, and 19, neither Takemoto nor Baiker disclose the use of communication network by which to store acoustic data. Ueta discloses that "the *storage device* is further provided with a constant velocity value and the controller is further provided with a *measured velocity value* form the *external input* and compares the measured velocity value with the constant velocity value *to produce a corrected velocity value* which is applied to the audible output" [Emphasis added] (see Ueta's claim 18). The Examiner maintains that the "*external input*" is accessed via a communication network and wherein correction data is stored accordingly. It would have been obvious to one of ordinary skill in the art to combine the teachings of Takemoto, Baiker and Ueta to obtain a sound producing apparatus capable of correcting velocity data via communication port. Regarding claims 11 and 21, both Ueta and Baiker and Takemoto disclose the use of digital instruments, presumable with a digital interface (see fig. 1 of Takemoto; fig. 5 of Ueta) It would have been obvious to one of ordinary skill in the art to combine the teachings of Takemoto, Baiker, and Ueta to obtain a velocity correcting apparatus having both a communication network and a digital interface. The motivation for making this combination is that by providing a communication network and digital interface provides for downloading files (and file types) from a myriad of suppliers, including Internet commerce sites and manufacturers, thus enticing the user to purchase and update data.

Allowable Subject Matter

8. Claims 3 – 9 and 13 – 15 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. The prior art does not disclose the formula by which the Applicant's use to correct velocity data.

Conclusion

9. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The patents to Ishida ('695) and Joseph ('147).disclose various means by which to correct velocity (i.e., volume).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to David S. Warren whose telephone number is 571-272-2076. The examiner can normally be reached on M-F, 9:30 A.M. to 6:30 P.M..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Martin can be reached on 571-272-2800 ext 37. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

dsw

MARLON T. FLETCHER
PRIMARY EXAMINER